



## United States Department of the Interior Fish and Wildlife Service



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November 30, 2010

Mr. Eric Langer  
Indiana DNR, Division of Reclamation  
14619 West State Road 48  
Jasonville, IN 47438-9517

Company Name: United Minerals, Inc.  
Permit No: S-357  
Pit Name: Seven Hills Mine  
County: Warrick

Dear Mr. Langer:

This responds to your letter of October 21, 2010 requesting U.S. Fish and Wildlife Service (FWS) comments on a permit application for the aforementioned mining operation.

These comments are consistent with the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.), the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, the U. S. Fish and Wildlife Service's Mitigation Policy, and the Indiana Coal Mining Regulatory Program, Section 310 IAC 12-3-107.

The proposed permit area covers 2351 acres. The major pre-mining land uses are listed as wildlife (1145 acres) and forest (588.9 acres). Cropland and pasture together occupy 389.7 acres, and surface water occupies 204.4 acres (chiefly in previous strip pits). The proposed post-mining acreages for each land use category are listed as identical to pre-mining acreages.

The permit area contains a combination of undisturbed bottomland along Pigeon Creek, including approximately 17,500 feet of the Pigeon Creek channel, and previously mined land in the North Millersburg (S-216), South Millersburg (S-274) and Ayrshire (S-4) mines. Most of the previously mined land has been reclaimed to a mixture of forest, wildlife land and agricultural land. The North Millersburg mined land on the east side of the Pigeon Creek floodplain was to have been restored to its pre-mining condition of bottomland forest, however the actual restoration consisted chiefly of a mixture of upland fields, upland non-forested wildlife habitat and large, shallow permanent impoundments. In the South Millersburg Mine the floodplain wetlands on the east side of Pigeon Creek were preserved. Most of the Ayrshire mine was approved before the FWS began reviewing coal mining permits in Indiana. Based on the current landscape it appears that mining activity in part of the permit area extended close to Pigeon Creek and in other parts the floodplain was mostly preserved. Aerial photographs indicate that

most of the remaining unmined bottomland in the S-357 permit area is located in the northern half of the permit area on the west side of Pigeon Creek, with a much smaller area at the southwest extent of the permit area (within the boundaries of the previous South Millersburg Mine).

This office of the FWS reviewed a previous surface mining proposal in the same reach of the Pigeon Creek corridor in 1995 (Mining Permit #S-323, Millersburg II Area). The S-323 permit boundaries did not extend east of Pigeon Creek, except for a small area north of Seven Hills Road. That permit application was withdrawn in 2001 along with another surface mining permit application further north along Pigeon Creek (S-326). A copy of our comment letter dated November 8, 1995 is attached.

We also reviewed the preliminary stages of this proposed surface mine operation in 2007, in connection with a pre-mining bat survey in 2006-2007 and a December 19, 2007 pre-application meeting for a Section 404 permit application pursuant to the federal Clean Water Act. At that time the estimated mining impacts, based on a wetland delineation, included 445 acres of wetlands (407 acres forested); 25,630 feet of streams (24,560 feet intermittent and 1070 feet ephemeral); and 24.7 acres of open water. The current surface mining permit proposal does not provide an estimate of water resource impacts and at this time there is not an active Section 404 permit application. The proposed operations plan is very similar to the operations plan presented at the December 19, 2007 meeting; therefore we assume that the impacts will also be similar. The current operations plan map differs from the previous plan map by showing a haul road crossing of Pigeon Creek south of Greenbrier Road. Both plans show setback levees at distances varying from approximately 100 - 850 feet from Pigeon Creek. In the widest setback area, at the north end of the permit area, the current operations plan depicts auger mining.

The operations map shows sediment basins and auger mining on the east side of Pigeon Creek in the northern portion of the permit area. The existing basins and tree plantings within that area are part of the previously referenced wetland mitigation for the North Millersburg Mine, and should not be used for sediment control or otherwise altered without approval of the Corps of Engineers.

The affected wetlands and other bottomland forest provide abundant habitat for numerous and significant wildlife species, including migratory birds, Indiana bats and copperbelly watersnake (both discussed in more detail in the Endangered Species section of this letter). We do not have a comprehensive bird species list for the permit area, however as pointed out in our previous comments bird surveys by Audubon Society members in the Buckskin Bottoms area north (upstream) of the permit area reported over 180 species of birds including 9 species listed at that time as State-endangered species.

## Cumulative Impacts

Our November 8, 1995 comment letter (attached) points out that the S-323 permit, in combination with the 2 previous Millersburg Mines, would permanently or temporarily eliminate the vast majority of approximately 4000 acres of habitat along the Pigeon Creek corridor. As previously stated in this letter, the bottomland forest in the North Millersburg permit area was permanently lost. The acreage figures referred to in our previous letter were only estimates, and the current mining plan is different than the plan for S-323, but the general conclusion regarding cumulative impacts is still valid.

In summary, in our November, 1995 letter we recommended that the permit application not be issued as proposed, but should be modified to preserve the bottomland/wetland corridor and the copperbelly water snake habitat. We also recommended a complete wetland delineation and an assessment for the potential presence of Indiana bats, both of which have been done for the current mining proposal. The current mining plan is generally similar to the previous plan with the most notable difference being the aforementioned setback/augering area immediately south of Seven Hills Road, and no mining disturbance north of Seven Hills Road (which is not included in the current permit boundary).

The FWS continues to oppose a mining plan that will substantially alter the Pigeon Creek bottoms and result in hundreds of acres of wetland impacts. We recommend that the mining operation be altered to avoid mining disturbance in existing forest and wetland habitat in the Pigeon Creek floodplain.

### Endangered Species

The aforementioned permit is within the range of the Federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There is suitable summer habitat for this species throughout the proposed permit area and the surrounding area. The applicant commissioned bat surveys of the permit area in 2006 and 2007. The survey report states that 13 lactating female Indiana bats were captured and a primary roost tree was found south of the permit area through radio-telemetry tracking. Twelve of the Indiana bats were captured within 2.6 miles of the primary roost, which is approaching the normal foraging limits for lactating females, and the 13<sup>th</sup> bat was captured 4.2 miles north of the primary roost.

The proposed mining activity would temporarily or permanently eliminate at least 600 acres of summer habitat for Indiana bats and restored forest will not become suitable habitat for many years. Based on the FWS= 1996 national biological opinion issued to the Office of Surface

Mining, the FWS has typically recommended the following Indiana bat conservation measures for coal mining.

1. To prevent incidental take from removal of an occupied roost tree, tree-clearing must be avoided along waterways and adjacent forested areas during the summer reproductive season (April 1 - September 30).
2. Avoid tree clearing for non-extraction activities (e.g. sediment ponds, access and haul roads, soil stockpiles and refuse disposal), except at unavoidable crossings of linear features such as roads.
3. If parts of the forested summer habitat will not be mined for at least 2 years after the permit application is approved, preserve the trees in those areas until the last Indiana bat non-occupancy period (October 1 - March 31) prior to mining.
4. Drainageways are an essential component of Indiana bat summer habitat. Forested drainageways should be restored in a network comparable to the pre-mining condition.
5. Post-mining forest restoration should be comparable in size and no less diverse than the pre-mining forest and should include species suitable for Indiana bat nursery roosts.

An Indiana bat maternity colony from a known primary maternity roost tree has been documented using the southern portion of the proposed permit area for foraging, and bat survey results suggest the presence of an additional maternity colony which forages on the northern end of the permit area. Because of the presence of Indiana bats the permit area contains **Known habitat**, as defined in the June 10, 2009 Range-wide Indiana Bat Protection and Enhancement Plan Guidelines for the national Biological Opinion (Guidelines). When a coal mining operation will impact known habitat, the Guidelines require the mining permit applicant to submit to the FWS and the State Regulatory Authority an Indiana Bat Protection and Enhancement Plan, which includes the following elements:

1. Define the nature and extent of adverse effects on Indiana bats. The extent of impacts should also address cumulative impacts from previous surface mining permits.
2. Implement measures to avoid disturbance of important habitat elements.
3. Implement measures to minimize overall adverse effects.

The Guidelines also state that the State Regulatory Authority (in this case the Indiana DNR) will prepare a report that quantifies the expected amount of incidental take of Indiana bats associated with each mining permit.

The project is also within the range of the copperbelly water snake (*Nerodia erythrogaster neglecta*). This species is known to have reproducing populations along the Pigeon Creek corridor and was studied and monitored intensively during and after the South Millersburg Mine permit approval process, because the species was proposed for inclusion on the federal endangered species list at that time. Listing in southern Indiana was precluded due to development of a Copperbelly Water Snake Conservation Agreement and Strategy endorsed by the FWS the Indiana DNR and the Indiana Coal Council (Agreement). The Agreement defines

multiple Core Area Habitats not to be disturbed by surface mining, and established restrictions and strategies for protecting and maintaining other copperbelly water snake habitats.

This agreement has subsequently expired. Since the expiration all parties to the Agreement have voluntarily continued to implement the goals of that document, to avoid and conserve copperbelly water snake habitat. This permit application is the first action we are aware of that would not follow the tenants of the Agreement; therefore the FWS is opposed to the permit as proposed. We further recommend that all parties involved in the original Agreement reconvene to determine the necessity of renewing that effort so that the need to list the southern Indiana copperbelly water snake population under the Endangered Species Act may be precluded.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

Scott E. Pruitt  
Field Supervisor

cc: Ramona Briggeman, IDNR Division of Reclamation, Jasonville, IN  
Roger Hedge, IDNR Division of Nature Preserves, Indianapolis, IN  
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